ABSTRACT

A computer aided design system and a computer aided
design program which can greatly increase the utility of a
5   computer aided design model, and can improve the efficiency of
design and production processes, by adopting a curved surface
theory which ensures the continuity of a free-form line or
surface. A computer executes: a point sequence information
extraction process for extracting a plurality of point
10   sequences on a curved surface; a dividing process for
generating a curved surface from the point sequences and
dividing the curved surface into a predetermined number of
mesh points; a first fundamental form computing process for
computing coefficients of the first fundamental form; a second
15   fundamental form computing process for computing coefficients
of the second fundamental form; and a storage process for
storing the point sequence information, the coefficients of
the first fundamental form and the coefficients of the second
fundamental form.